

UDOT Minimum Sampling and Testing Requirement

Revised: May 2006

02741 Hot Mix Asphalt

02741

Standard Specification

Related Items: N/A

Type of Construction: Aggregate Source

Submittals:

Quality Assurance: Submit adequate sample of aggregate from each source (use form T-268)

Assurance Frequency: N/A

Point of Acceptance: N/A

Out of Spec Action: N/A

Documentation/Report:

Type of Construction: Aggregate Source

Submittals:

Quality Assurance: AASHTO T-19 Unit Weight**

Assurance Frequency: 1 per source.

Point of Acceptance: Stockpile or pit

Out of Spec Action: Contractor must select another materials source

Documentation/Report:

Type of Construction: Aggregate Source

Submittals:

Quality Assurance: AASHTO T-104 Soundness of Aggregate by use of Sodium Sulfate**

Assurance Frequency: 1 per source.

Point of Acceptance: Stockpile or pit

Out of Spec Action: Contractor must select another materials source

Documentation/Report:

*Performed or approved by Region Lab **Performed by Contractor and reviewed by Engineer

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Related Items: N/A**Type of Construction:** Aggregate Source**Submittals:****Quality Assurance:** AASHTO T-96 L.A. Wear****Assurance Frequency:** 1 per source.**Point of Acceptance:** Stockpile or pit**Out of Spec Action:** Contractor must select another materials source**Documentation/Report:****Type of Construction:** Aggregate Source**Submittals:****Quality Assurance:** AASHTO T-112 clay lumps and friable particles****Assurance Frequency:** 1 per source.**Point of Acceptance:** Stockpile or pit**Out of Spec Action:** Contractor must select another materials source**Documentation/Report:****Type of Construction:** Aggregate properties**Submittals:****Quality Assurance:** ASTM D-5821 Fract-face****Assurance Frequency:** 1 test per week**Point of Acceptance:** Stockpile**Out of Spec Action:** Reject Stockpile**Documentation/Report:****Type of Construction:** Aggregate properties**Submittals:****Quality Assurance:** AASHTO T-89 , T-90 - plastic limit and plasticity index ****Assurance Frequency:** 1 test per week**Point of Acceptance:** Stockpile**Out of Spec Action:** Reject Stockpile**Documentation/Report:**

Related Items: N/A

Type of Construction: Aggregate properties**Submittals:****Quality Assurance:** AASHTO T-304 Fine aggregate angularity ****Assurance Frequency:** 1 test per week**Point of Acceptance:** Stockpile**Out of Spec Action:** Reject Stockpile**Documentation/Report:**

Type of Construction: Aggregate properties**Submittals:****Quality Assurance:** UDOT Materials Manual of Instruction 933 Flakiness Index 23% max.****Assurance Frequency:** 1 test per week**Point of Acceptance:** Stockpile**Out of Spec Action:** Reject Stockpile**Documentation/Report:**

Type of Construction: Aggregate properties**Submittals:****Quality Assurance:** AASHTO T-176 Sand equivalent ****Assurance Frequency:** 1 test per week**Point of Acceptance:** Stockpile**Out of Spec Action:** Reject Stockpile**Documentation/Report:**

Type of Construction: Superpave volumetric mix design verification**Submittals:****Quality Assurance:** AASHTO T-312 and PP-28 Gyratory volumetric mix design***Assurance Frequency:** 8 specimens/design**Point of Acceptance:** Verified mix design prior to paving**Out of Spec Action:** New mix design**Documentation/Report:**

Related Items: N/A

Type of Construction:**Submittals:****Quality Assurance:** AASHTO T-283 as modified by UDOT 8-957 Lottman test****Assurance Frequency:** 1 test 6 specimens/test**Point of Acceptance:** Verified mix design prior to paving**Out of Spec Action:** New mix design**Documentation/Report:**

Type of Construction:**Submittals:****Quality Assurance:** Pavement Analyzer**Assurance Frequency:** 1 test 3 specimens/test**Point of Acceptance:** Verified mix design prior to paving**Out of Spec Action:** New mix design**Documentation/Report:**

Type of Construction:**Submittals:****Quality Assurance:** AASHTO T-308 asphalt content of hot mix asphalt by the ignition method**Assurance Frequency:** (2 sets of 5 samples) 10 cold feed samples at the verified design and production asphalt binder**Point of Acceptance:** After verified mix design, prior to paving**Out of Spec Action:** N/A**Documentation/Report:**

Related Items: N/A

Type of Construction:**Submittals:****Quality Assurance:** AASHTO 209 - Rice**Assurance Frequency:** 4 Samples**Point of Acceptance:** N/A**Out of Spec Action:** N/A**Documentation/Report:**

Type of Construction:**Submittals:****Quality Assurance:** AASHTO T-40 sampling of bituminous materials (Binder)**Assurance Frequency:** As per 02745**Point of Acceptance:** Hot plant**Out of Spec Action:** N/A**Documentation/Report:**

Type of Construction:**Submittals:****Quality Assurance:** UDOT Materials Manual Part 8-961 and ASTM D-3665 sampling of hot mix asphalt and random sampling**Assurance Frequency:** 4 tests per lot**Point of Acceptance:** Project site**Out of Spec Action:** N/A**Documentation/Report:**

Type of Construction:**Submittals:****Quality Assurance:** AASHTO T-195 degree of particle coating**Assurance Frequency:** Initial, then once a week**Point of Acceptance:** Hot plant**Out of Spec Action:** Modify production to meet coating requirement**Documentation/Report:**

Related Items: N/A

Type of Construction:**Submittals:****Quality Assurance:** AASHTO T-308 asphalt content of hot mix asphalt by the ignition method**Assurance Frequency:** 4 tests per lot**Point of Acceptance:** Project site**Out of Spec Action:** Bonus/deduction/rejection**Documentation/Report:**

Type of Construction:**Submittals:****Quality Assurance:** AASHTO T-11, T-27, and T-30 mechanical analysis of extracted aggregate**Assurance Frequency:** 4 tests per lot**Point of Acceptance:** Project site**Out of Spec Action:** Bonus/deduction/rejection**Documentation/Report:**

Type of Construction:**Submittals:****Quality Assurance:** ASTM D-2726 Density of cores**Assurance Frequency:** 10 cores per lot with two cores per subplot**Point of Acceptance:** Project site**Out of Spec Action:** Bonus/deduction/rejection**Documentation/Report:**

Related Items: N/A

Type of Construction:**Submittals:****Quality Assurance:** ASTM D-3549 thickness of compacted hot mix asphalt specimens**Assurance Frequency:** 10 cores per lot with two cored from each subplot**Point of Acceptance:** Project site**Out of Spec Action:** Correction**Documentation/Report:**

Type of Construction:**Submittals:****Quality Assurance:** AASHTO T-209 maximum specific gravity of bituminous mixture (Rice)**Assurance Frequency:** 2 Density tests for each lot. (One Rice is an average of two replicates)**Point of Acceptance:** Project site**Out of Spec Action:** N/A**Documentation/Report:**

Type of Construction:**Submittals:****Quality Assurance:** AASHTO T-209 maximum specific gravity of bituminous mixture (Rice)**Assurance Frequency:** 1 Density test for VMA for each lot. (One Rice is an average of two replicates)**Point of Acceptance:** Project site**Out of Spec Action:** N/A**Documentation/Report:**

Related Items: N/A

Type of Construction:**Submittals:****Quality Assurance:** AASHTO T-312, PP-28 Gyratory volumetric mix design (VMA)**Assurance Frequency:** 3 Tests/lot 2 specimens/test**Point of Acceptance:** Project site**Out of Spec Action:** Bonus/deduction/rejection**Documentation/Report:**

Type of Construction:**Submittals:****Quality Assurance:** AASHTO T-283 as modified by UDOT 8-957 Lottman test
(For information only)****Assurance Frequency:** 1 test per week 6 specimens/test**Point of Acceptance:** Project site**Out of Spec Action:** N/A**Documentation/Report:**

Type of Construction:**Submittals:****Quality Assurance:** Pavement analyzer (Fatigue test)
(For information only)**Assurance Frequency:** 2 tests/project 3 specimens/test**Point of Acceptance:** Project site**Out of Spec Action:** N/A**Documentation/Report:**

Related Items: N/A

Type of Construction:**Submittals:****Quality Assurance:** ASTM E 1274

Pavement roughness using a profilograph**

Assurance Frequency: 2 runs per lane per production day within 2 days of placement
(one per wheel path)**Point of Acceptance:** Project site**Out of Spec Action:** Correction and reprofile**Documentation/Report:**